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# "ASSESS THE KNOWLEDGE REGARDING PREGNANCY INDUCED HYPERTENSION AMONG PRIMIGRAVIDAE IN SELECTED RURAL PHC'S AT BENGALURU WITH A VIEW TO DEVELOP AN INFORMATION GUIDESHEET."

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## ABSTRACT

**Background and Objectives:** Hypertensive disorders are one of the most common disorders during pregnancy and contributes significantly to maternal and perinatal morbidity and mortality. India accounts one quarter of maternal health of total deaths worldwide. India stands every high maternal mortality rate in the world showing an average MMR of 407 per lakh live births. The estimate MMR in Karnataka 95 per lkh live births. The PIH is also one of the major causes of maternal mortality (8%). PIH appears to range from 5% to 9% for gestational hypertension and from 5% to 7% for pre-eclampsia among nulliparous women without chronic hypertension. The incidence of PIH in nulliparous women is 4 to 5 times higher than in multipara. The present study attempts to "assess the knowledge regarding pregnancy induced hypertension among primigravidae in selected rural phc's at bengaluru with a view to develop an information guide sheet". The objectives were to assess the knowledge regarding pregnancy induced hypertension among primigravidae and to find the association between the level of knowledge scores and selected demographic variables and to develop and distribute an information guide sheet regarding pregnancy induced hypertension to primigravidae.

## KEYWORDS

Hypertensive disorders and Pregnancy induced.

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## INTRODUCTION

Pregnancy is a one of the wonderful and noble service imposed by nature. Pregnancy is a special event. Pregnancy is the period of happiness expectancy, excitement, anxiety and fear. Pregnancy is natural physiological event. Pregnancy is a process which places the health of the mother at risk.

Most of the women may not have many problems during pregnancy, but some are, they face various problems related to pregnancy and child birth. The

success of child birth depends on the cooperative effort from mother, family and health care Professional.

Pregnancy induced hypertension is recognized as the death in which requires the united efforts of all members of the health care team in close collaboration with other medical personnel[5]. Incidence of eclampsia is approximately 1 in 1500 pregnancies. Of this about 50% occurs in the antenatal period, 30% occurs during the intra partum period and 20% takes place within the first few hours after delivery. Deaths due to eclampsia occur because of cerebral haemorrhage and adult respiratory distress syndrome.

**Need for the study**

Hypertensive disorder of the pregnancy are leading cause of maternal and infant mortality and morbidity, worldwide it has been estimated that approximately 50,000 women die every year from eclampsia. According to world health organization (WHO) it has been estimates, hypertensive disorder of pregnancy affect 5-10% of all pregnancies, 1.5% deaths per 1,00,000 live birth due to pre-eclampsia or eclampsia were reposted from U.S.A. As per the British Eclampsia survey (BES) mortality.

Interventions during pregnancy, may improve maternal outcomes. In this regard, the intervention includes primary prevention, detection of increased risk and early detection of any stage of PIH by antenatal adequate care. Secondary prevention of progression is by treatment at primary level or referral for expert care[5]. Caring of a primigravidae with eclampsia is a challenge to any midwife. The midwife's keen observation, prompt decision-making-ability to use life saving procedures and referral to the right place, at the right time, can save the mother and the baby.

**Statement of the problem**

"Assess the knowledge regarding pregnancy induced hypertension among primigravidae in selected rural PHC's, at bengaluru with a view to develop an information guide sheet."

**Objectives of the study**

- To assess the knowledge regarding pregnancy induced hypertension among primigravidae.
- To find the association between the level of knowledge scores and selected demographical variables.
- To develop and provide an information guide sheet regarding pregnancy induced hypertension for primigravidae.

**Assumption**

- The primigravidae may possess some knowledge regarding pregnancy induced Hypertension.
- Developing and providing an information guide sheet will improve the knowledge of Primigravidae regarding pregnancy induced hypertension.

**Review of literature**

A descriptive study was conducted among 153 antenatal mothers attending the OPD of a co-operative hospital, Malappuram, Kerala to determine the knowledge level of antenatal mothers regarding gestational hypertension and its complications arising for both mother and the foetus. Samples who were selected using convenient sampling technique were administered a structured questionnaire to evaluate the knowledge level. The study findings showed that among the respondents, only few mothers (21%) were having good knowledge regarding gestational hypertension, its manifestations (19%), need for medical intervention (37%), its complications (11%) and its prevention (9%). The mothers with adequate knowledge were educated than the others. And it was concluded that an extensive health teaching is required to improve the level of knowledge about this condition among the antenatal population.

A descriptive study conducted among antenatal mothers to assess the knowledge regarding the control of PIH at the SAT hospital, Trivandrum. The tool used for the study was interview schedule and used analysis was chi-square, frequency percentage. The study concluded that the knowledge level of antenatal mothers, regarding PIH and its control measures, were highly inadequate.

## METHODS AND RESULTS

The research approach used in the present study is Non experimental research design; the setting is in

selected rural PHC's at bengaluru. The samples include 80 primigravidae selected by Non-probability purposive sampling technique. The tool consists of Part I demographic data consists of 10 items, Part II structured knowledge questionnaire consisting of 28 knowledge questions. 80 primigravidae were interviewed by using structured knowledge questionnaire.

The results on general information on pregnancy induced hypertension 59.50%, warning signals of pregnancy 55.42%, Predisposing factor of PIH 55.0%, Diagnostic measure of PIH 56.25%, Complication of PIH 51.88%, Management of PIH 47.81%, Prevention of PIH 53.75%. The overall mean knowledge score of respondents was 53.62% with S.D score 3.85002. And 53.75% had inadequate knowledge and 42.5% moderately adequate knowledge and 3.75% adequate knowledge.

**Interpretation and conclusion**

The overall finding showed that the primigravidae in general possess the only 3.75% adequate knowledge regarding pregnancy induced hypertension.

Thus to conclude, the instigator has achieve the objectives for assessing the knowledge regarding pregnancy induced hypertension and based on the findings, information guide sheet has been developed and distributed.

## METHODOLOGY

Research methodology is defined as the way of pertinent information is gathered in order to answer the research questions by analyzing the research problems. Research methodology involves the systematic proceeding by which the research starts from the time of initial identification of its final conclusion. The present study was conducted to "Assess the knowledge regarding pregnancy induced hypertension among primigravidae in selected rural PHC's, at bengaluru with a view to develop an information guide sheet."

**RESEARCH APPROACH**

Evaluative approach

**RESEARCH DESIGN**

Non experimental descriptive survey design

**SETTING OF THE STUDY**

Rural PHC's at Bengaluru.

**TARGET POPULATION**

Primigravidae in selected rural PHC's at Bengaluru.

**SAMPLE AND SAMPLING TECHNIQUE**

80 primigravidae in selected rural PHC's at Bengaluru.

**VARIABLES UNDER STUDY**

Dependent demographic variables.

**Demographic Variables**

The selected demographic variables in this study are Age, Age at marriage, Religion, Education, Type of family, Occupation, Duration of married life, Residential area, Monthly income of the family (in rupees), Source of health information regarding Pregnancy induced hypertension.

**Development of Tool**

A Structured Knowledge Questionnaire was developed to assess the knowledge of primigravidae regarding Pregnancy induced hypertension.

The following steps were carried out in preparing the tool.

1. Literature review.
2. Preparation of blue print.
3. Consultation with the Guide, Statistician, Subject Experts of Obstetrics and Gynaecological Nursing.
4. Establishment of validity and reliability.

**Description of the Tool**

**SECTION-A**

Deals with socio-demographic data consists of 10 items used to collect the sample characteristics, which comprises of Age, Age at marriage, Religion, Education, Type of family, Occupation, Duration of married life, Residential area, Monthly income of the family (in rupees), Source of health information regarding Pregnancy induced hypertension.

**SECTION-B**

Consists of 28 items of knowledge questionnaire, it was developed on selected knowledge regarding Pregnancy induced hypertension among primigravidae by using multiple choice questions. This covered the following components:

- General information on Pregnancy induced hypertension.
- Warning signals of pregnancy
- Predisposing factor of PIH

- Diagnostic measure of PIH
- Complication of PIH
- Management of PIH , Prevention of PIH

**RELIABILITY AND VALIDITY OF TOOL**

It refers to "The degree to which the instrument measures what it is intended to measure." The prepared tool along with objectives was sent to 12 experts who comprised of 9 Obstetrics and Gynaecological Nursing experts, 2 experts of Obstetrician and 1 Statistician. The tool was finalized based on the recommendations and suggestions of experts and the guide. Suggestions were suggested in section A by the experts, to add Age groups In Section -B, two questions were deleted as per expert suggestion.

**RELIABILITY OF THE TOOL**

The reliability of the tool is computed using Spilt Half Karl Pearson's correlation formula (Raw Score Method) The reliability co-efficient of structured knowledge questionnaire was found to be 0.77 and validity co-efficient worked to be 0.87 for knowledge questionnaire, revealing that the tool was found to be feasible for administration for the main study. Since the knowledge reliability co-efficient for the scale r > 0.70. The tool was found to be reliable and feasible.

**Development of Information Guide sheet**

The Information Guide sheet was based on results obtained, review of research articles, journal articles, internet searches, discussion with experts and personal experience of the investigator.

The steps involved in the development of information guide sheet (IGS)

1. Preparation of the first draft of the information guide sheet.
2. Content validation of information guide sheet
3. Editing of information guide sheet.
4. Preparation of the final draft of information guide sheet

Table No.1, 2 and Figure No.1 shows the knowledge level of respondents on Pregnancy Induced Hypertension. It is evident from the result that 53.75% of the respondents found inadequate knowledge and 42.5% who posse's moderate knowledge level and remaining 3.75% respondents noticed with adequate knowledge of Pregnancy Induced Hypertension.

Reveals that the obtained value ($\chi^2 = 11.54$) was more than the table value at 5% level. There is significant association was found between family income per month and knowledge score.

**DISCUSSION**

The findings of the study revealed that majority (48.8%) of the respondents were between the age group of 19-23 years. In relation to education majority (30.0%) of the respondents studied up to secondary education.

**Association between the level of knowledge scores and selected demographic variables.**

Findings reveals that demographic variables like Family income per month, strongly associated with the knowledge on Pregnancy induced hypertension and remaining variables like age, age at marriage, religion, educational status, occupational status, residential area, duration of marriage life, family income, type of family and source of information is found to be non significant at 5% level regarding Pregnancy induced hypertension.

**Development of an Information guide sheet regarding Pregnancy induced Hypertension**

In this study the investigator developed Guide sheet regarding Pregnancy Induced hypertension based on this finding of the study. Higher weight age was given to the areas of less knowledge in order to remove barrier to action. By keeping in view the guide sheet would be useful to enhance the knowledge of Pregnancy induced Hypertension among primigravidae.

**IMPLICATIONS OF THE STUDY**

**Implications in nursing practice**

The present study results revealed that primigravidae mothers have moderate knowledge about Pregnancy induced hypertension. The study results showed that the primigravidae has inadequate and moderate knowledge about Pregnancy induced hypertension. The programme developed by the investigator can be used to improve the knowledge on Pregnancy induced hypertension to help them to acquire basic

health knowledge about Pregnancy induced hypertension.

**Implication in nursing education**

The nurse educator can very well implement the findings of the present study while training the budding primigravidae. As the present study proved that reinforcement is necessary to improve the knowledge regarding Pregnancy induced hypertension. This fact can be applied while training the primigravidae so as part of the education process; nurses should also assist teachers in formulating a plan to combat PIH. A key role of nurses is to educate the people on various aspects about healthy practices in a variety of settings such as PHC, CHC, colleges, community organizations, occupation. Curriculum planners has to take serious consideration of the present study and educational reformation can be implemented to achieve the expected objectives, their by producing healthy Primigravidae.

**Implication in nursing administration**

Nurse administrators can plan and implement continuing nursing education plan to train the primigravidae regarding Pregnancy induced hypertension. This will help the nurse administrator to prepare adequate learning materials for giving health information regarding Pregnancy induced hypertension rural PHC's bengaluru setting. She should organize to see that sufficient manpower, money and material for disseminating health information nursing personnel should be prepared to take leadership role in educating the primigravidae regarding Pregnancy induced hypertension.

**Implication in nursing research**

The main goal of the nursing research is to improve patient care through the implementation of evidenced based practice. The study provides a baseline data for conducting other research studies. The study will be a motivation for the promising researchers to conduct similar studies in large scale. The study will be a reference for the research scholars. The present study is only an initial investigation in the area of teaching the primigravidae regarding Pregnancy induced hypertension. Further research can be carried out in a different setting by avoiding all limitations of the present study will definitely come out with the findings that can be generalized.

## LIMITATIONS OF THE STUDY

The samples were drawn from specific geographic area this restricts the generalization of the results. Study is limited only to those who were willing to participate in the study. Study samples were small. There were time limitations to complete the study. The finding could be generalized only to the population which fulfilled the criteria in the study, the study limited to assessment of knowledge and preparation of Information Guide Sheet and the study did not attempt at evaluating its effectiveness.

## RECOMMENDATIONS OF THE STUDY

On the basis of the findings of the study, the following recommendations have been made:

- A study can be conducted on larger samples, thereby findings can be generalized.
- An experimental study can be undertaken by having a control group.
- A comparative study can be conducted in different settings.
- A follow-up study can be carried out to find the effectiveness in terms of information guide sheet on importance of Pregnancy induced hypertension.
- A comparative study can be conducted to find the differences in the knowledge of primigravidae mothers on the basis of various settings such as urban PHC's.

## SUMMARY

## MAJOR FINDINGS OF THE STUDY

**Findings Related To Sample Characteristics**

- Age distribution shows that highest percentage of respondents were between age group of 19-23 years (48.8%).
- Age at marriage distribution shows that highest percentage of respondents was between age group of19-23 years (50.0%).
- Majority of the respondents were secondary education (30.0%).

- While considering the occupational status of the respondents belongs to house wife (53.8%).
- Majority of respondents' family monthly income was between Rs.10,001-15,000 (46.3%).
- Majority of respondents were Hindus (71.3%).
- While considering the type of family majority of respondents belongs to joint family (55.0%).
- Duration of marriage life distribution shows that highest percentage of respondents were within one year (56.3%).
- Majority of respondents got information about Pregnancy induced hypertension from health personal (51.2%).
- Majority of respondents were belongs to residential area rural (100%).

**Findings related to knowledge of respondents regarding Pregnancy induced hypertension.**

- The overall mean knowledge score of respondents was 53.62% with SD 3.85002%.
- 53.75% of the respondents had inadequate knowledge and 42.5% had moderate knowledge and adequate knowledge 3.75%.
- The highest mean knowledge score related to Pregnancy induced hypertension was found in the aspect of General information regarding PIH (59.50%).
- The lowest mean knowledge score was found in the aspect of Management of PIH (47.81%).

**Findings related to association between knowledge scores with selected socio-demographic variables**

Findings reveals that demographic variables like Family income per month, strongly associated with the knowledge on Pregnancy induced hypertension and remaining variables like age, age at marriage, religion, educational status, occupational status, residential area, duration of marriage life, family income, type of family and source of information is found to be non significant at 5% level regarding Pregnancy induced hypertension.

**Table No.1: Classification of Respondents on knowledge Level on Pregnancy Induced Hypertension n=80**

| S.No | Grading of knowledge | Frequency | (%) |
|---|---|---|---|
| 1 | Inadequate knowledge | 43 | 53.75 |
| 2 | Moderately adequate knowledge | 34 | 42.5 |
| 3 | Adequate knowledge | 3 | 3.75 |
| | Total | 80 | 100.0 |

**Table No.2: Association between Family income per month and knowledge level of Respondents regarding Pregnancy induced hypertension**

| S.No | | | Overall Knowledge | | | | |
|---|---|---|---|---|---|---|---|
| 1 | | | Median and below | | Above median | | Chi square |
| 2 | | | N | % | N | % | |
| 3 | Family income per month | <5000 | 11 | 91.7 | 1 | 8.3 | 11.54* |
| 4 | | 5001-10,000 | 11 | 52.4 | 10 | 47.6 | DF=3 |
| 5 | | 10,001-15000 | 20 | 54.1 | 17 | 45.9 | |
| 6 | | 15,001 above | 2 | 20 | 8 | 80 | |

*** - significant at 5%** **$\chi^2$ – (0.05, 3df) =7.82**

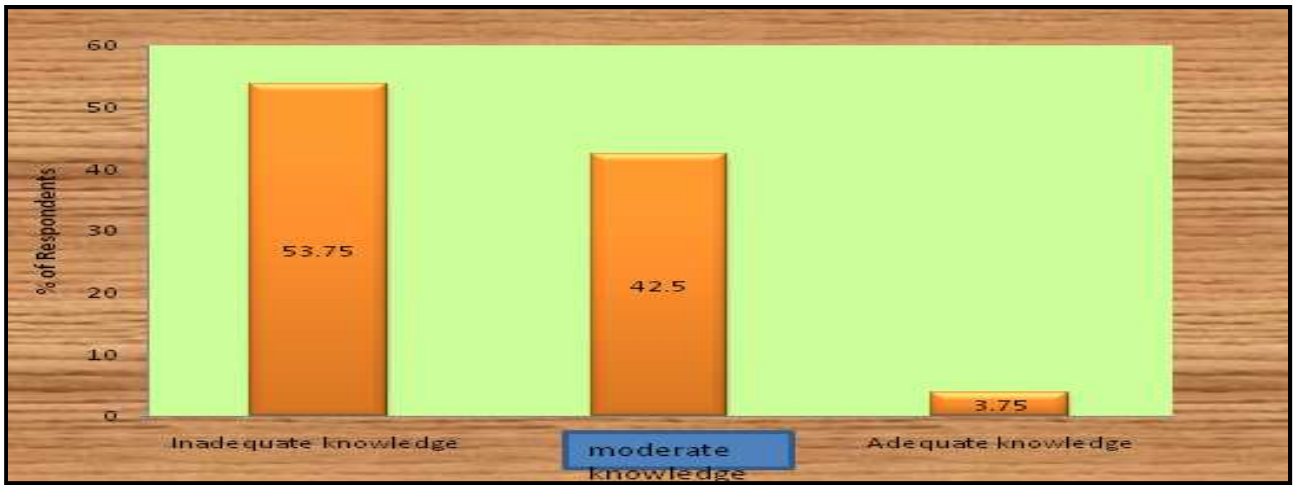


**Figure No.1: The knowledge level on Pregnancy Induced Hypertension among Primigravidae**

## CONCLUSION

The main focus of the present study was to assess the knowledge regarding pregnancy induced hypertension among primigravidae in selected rural PHC's, at Bengaluru with a view to develop an information guide sheet. The present study findings showed knowledge scores of majority of respondents were moderate. The findings of the study revealed that the overall mean % was 53.62% and SD found to be 3.85%.

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## CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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